

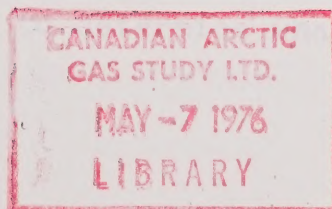
EXPERIMENTAL DUMPING OF OIL
IN THE BEAUFORT SEA

LORRAINE ALLISON

MADEIRA LARRY BERGER INQUIRY
EXHIBIT NO. J-12A E April 8/76
Yellowknife NWT.
C.O.P.E.

EVIDENCE PRESENTED ON
BEHALF OF
COPE

DELTA PHASE, BERGER INQUIRY
Inuvik, February 1976





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In February of 1975, while COPE field workers were visiting in Tuktoyaktuk, a rumour of deliberate dumping of oil in the Beaufort Sea surfaced. According to the rumour, 50,000 gallons of oil were to be spilled. The purpose of deliberate offshore spills of oil in the Beaufort Sea was unclear, but it was a matter of concern to some Tuk residents. They asked the COPE field workers to relay their concerns to Inuvik and to find out what they could about the spill.

Reasoning that this might be a part of the widely publicized Beaufort Sea Project, I wrote to Allen Milne asking about the experiment. His reply stated that in this experiment about 1200 gallons of oil would be dumped. The purpose of the spill, stated in an outline appended to his letter, was to assess whether oil released at the bottom of the ocean in a blowout might emulsify in the water column. A second objective was to determine how such oil spread under and became trapped within the ice. Some experiments were proceeding at protected Balaena Bay on Cape Parry in still water and the experimenters wished to test the effects of a current on the behaviour of oil. According to the outline which came with Mr. Milne's letter, a current of 0.5 meters per second was required for the experiment. Mr. Milne offered to meet with COPE during a planned trip to Inuvik, but unfortunately the letter arrived after he had left town.

Mr. Sam Raddi, president of COPE, expressed his concern over the lack of consultation about the project and asked me to probe the matter further. The next steps were to determine what processes the pro-

ject had gone through to get permission for the spill and to ascertain whether COPE or the communities had previously been informed of the spill, which was scheduled for early April. During my investigation, I learned that the Arctic Waters Oil and Gas Advisory Committee had required the offshore experiment to be carried out under a separate permit from the Balaena Bay ones. That is, two separate sets of spills were occurring. Paulatuk had known of and approved the spills in Balaena Bay. The offshore spills, which were to be done 20 miles from Cape Parry, were a matter of contention.

When contacted by COPE, the hamlet secretary of Tuktoyaktuk and Garret Ruben, COPE director from Paulatuk, both stated that they had not heard of plans for a deliberate offshore spill and expressed a desire to know more about it and concern about the ultimate fate of the oil. Mr. John Hunt, Fisheries officer in Inuvik, told me he had attended a meeting at which a resident of Paulatuk was present, in which the offshore spill had been alluded to. He stated that the matter was not specifically raised and discussed. He felt that the offshore aspect of the spills could easily have been missed or misunderstood.

Later D.O..E. said the people of Paulatuk had been informed of the offshore work. No doubt D.O.E. representatives felt that they had explained the project, but it was evident that their explanation was not clear to the people in Paulatuk. No attempt had been made to inform Tuktoyaktuk or any of the other communities.

Mr. Thomas of D.I.A.N.D. in Yellowknife responded

to a query from COPE by sending an outline of the experiment--an experiment which appeared to me to differ substantially from the one outlined in Mr. Milne's letter. Mr. Ernie Pallister was operating the Beaufort Sea Environmental Program, the Arctic Petroleum Operator's Association's public relations vehicle. He had not heard of any offshore spill when I contacted him, but delayed publication of the April Beaufort Seer so that an article could be included. The article appeared after the spill was done. COPE executive in Inuvik concluded that the communities could not have been expected to be aware of D.O.E. plans for a deliberate offshore spill. They were also concerned because the various responses COPE received to its requests for information sounded like different experiments. Apparently the oil would be cleaned up only if it was discovered in a lead.

I had learned that some members of the Arctic Waters Oil and Gas Advisory Committee opposed the experiment and were not convinced of its scientific merit. A special permit had been issued by the minister of D.O.E. to allow D.O.E. to avoid prosecution under the Arctic Waters Pollution Prevention Act.

Although I was clearly not qualified to judge the scientific merit of such a proposal in detail, the yardstick of science is similar in all its disciplines. Because of the apparent confusion among proponents of the experiment, opposition from the A.W.O.G.A.C., and the concerns of the residents of Tuktoyaktuk, Paulatuk, Sachs Harbour, and Holman Island, it appeared that a reassessment of the scheme could only benefit all parties. I advised the COPE executive that an independent assessment of the proposal by an expert in that field might help us

to determine the merit of the oil dumping experiment. COPE decided to finance such an independent assessment if necessary and in the meantime to attempt to postpone or stop the spills.

On March 25, COPE sent a telex to Madame Sauve, then minister of D.O.E., pointing out their concerns and suggesting that the period between November and March would have been adequate to allow an independent assessment to be done. The telex also suggested that the companies involved might welcome an opportunity to demonstrate their ability to clean up a spill under the ice, and that even such a small spill should not be left. COPE requested that the minister stop the experiment. There was no reply. A follow-up telegram on April 1 elicited a response April 4. The telex from Deputy Minister Seaborne explained the rationale for the experiment, but still did not answer any of COPE's concerns. It did state that because April was a time of "low environmental sensitivity", the project could not be postponed.

In the meantime, COPE had learned that the oil would be released about 20 miles offshore of Cape Parry, in a current of about 10 centimeters per second, (the outline of November said a 50 centimeter per second current was required.) A third telegram was sent April 5. On April 5 and 6, COPE held a board of directors meeting in Inuvik. Members of the board felt that their concerns regarding lack of consultation and lack of clean up had not been adequately met. They issued a press release April 7, which recognized the need for scientific research. In fact COPE has, in the past, repeatedly requested that certain research be done. The press release reaffirmed the board's unanswered

concerns.

Mr. Raddi and I met with Mr. Milne on the evening of April 18, the same day the experiment was conducted. He described the experiment again and invited Mr. Raddi to send someone out to the site with a large party which was going the next day. I was selected to go.

Again I must state that I have a limited understanding of such experiments but the spill which was conducted did not seem to me to be the same as any of the dumping experiments which had been described to us earlier. Oil was released just under the ice, not at the bottom. The spills were reduced from 1200 to 360 gallons. The current was quite slow. Emulsification no longer appeared to be being tested. It seemed to me that the major conclusions one might draw from the experiment were the following:

1. oil moves downstream in a current;
2. if the bottom of the ice is smooth, it will form a slick, the thickness of which may depend in part on the strength of the current;
3. if the ice bottom is not smooth, oil will pool in any indentations;
4. if the ice is growing, oil will become incorporated in the ice (This is an inference from the experiment rather than a conclusion since observations of the oil ended within hours of it being spilled and prior to its incorporation in the ice.)

It also seemed to me that most of these conclusions were intuitively obvious and that they probably did not require ocean testing. I emphasize that the above conclusions were mine. I conveyed them to the COPE executive by memorandum and verbally.

3

Although personnel of the Beaufort Sea Project have been most cooperative about releasing draft copies of their reports, the report including the offshore oil spill has not yet reached us, so we are still unaware of their conclusions.

After the experiment had been completed, my final memorandum to COPE was circulated quite widely without my knowledge. I later learned that, upon reflection, a number of D.O.E. and D.I.A.N.D. personnel agreed with my reservations about experimental dumping of oil.

In the spring, D.O.E.'s contractor was able to locate the spill and burned off about half the oil. They were unable to prevent at least two eider ducks from being attracted to the shiny surface and being fouled with oil.

In November of 1975, COPE learned that the Environmental Protection Service proposed to conduct a further series of three or four deliberate oil spills beyond the land fast ice in the Beaufort Sea. Evidently E.P.S. recognized a responsibility to inform the communities. Radio messages were broadcast and letters sent out.

They arranged a meeting with COPE in Inuvik November 20. Mr. Raddi was in Yellowknife November 13 and E.P.S. asked to meet with him. Mr. Raddi asked me to attend too.

Neither Mr. Raddi or I knew the details of this new proposal to spill oil, but it was evident that the experiment had been planned with a minimum lead time; and apparently climatic conditions only allowed the experiment during a brief period in the fall. In the absence of

detailed information, Mr. Raddi could only re-express COPE's same concerns about such sensitive experiments being reviewed by independent experts and time being required for meaningful consultation with the communities.

The day after the Yellowknife meeting we learned that the experiment had been deferred. The original intention had been to conduct the spills prior to the discussions with COPE in Inuvik. The spills would not be done, I was told, until after the Inuvik meeting.

In the intervening week, COPE's board of directors prepared a position paper on field research. COPE recognized the need for research, but reiterated its requirement for consultation early in the decision making process for two reasons: first to realistically represent the concerns of the people in the communities, and second to contract independent evaluations of the proposed studies so the board could better understand the necessity, feasibility and impact of the research.

Bob DeLury (C.A.R.C. biologist working with COPE) and John Bayly informed the COPE executive of the Ocean Dumping Act passed by parliament in May of 1975. According to the Act, the proposed experiments seemed to be illegal.

An outline of the experiment was released to COPE and interested government agencies. It would be obvious to any scientist that the outline proposed a hastily contrived and inadequately researched piece of work. It appeared for instance, that the experiment would precede a review of pertinent literature. Opposition to

the experiment grew within other government agencies, I was told, and was expressed through internal channels.

The E.P.S. sent a telex to COPE outlining the terms of reference for the November 20 meeting. It stated that "if EPS is convinced on strictly technical and logical grounds at this meeting why this study should not proceed as proposed, EPS is prepared to modify the experiment or for that matter cancel it."

At the meeting in Inuvik, COPE was represented by its president, 8 members of the board and interested residents of Paulatuk and Tukotyaktuk, with scientific advice from Mr. DeLury. COPE learned that the Ocean Dumping Act would not be proclaimed for three weeks, but E.P.S. said they were nevertheless cleared to operate under that law. COPE passed a motion at the meeting that they would attempt to get an injunction if necessary to stop the oil dumping.

The meeting resulted in a two or three week delay for COPE to have an assessment of the proposal done. The whole experiment was later dropped for undisclosed reasons. In a letter to Mr. Raddi, Mr. Bryant, district manager of E.P.S., stated that most of the project had been deferred for at least a year, but that E.P.S. might wish to conduct one part of the experiment in April of 1976. He encouraged COPE to proceed with its evaluation of the spill and requested the evaluation by mid-February. COPE had contacted 12 Canadian and American scientists and asked them to evaluate the E.P.S. proposal. They were supplied with all the material available to COPE and were asked two questions; firstly how important are the detailed questions which E.P.S. proposes to investi-

gate? and secondly will the objectives of the study be achieved by the methods outlined?

To answer the first question, the scientists required information which was not and still is not publicly available. E.P.S. declined to provide it after the experiment was postponed. The answer to the second question was that the experiment had been inadequately planned.

The November-December issue of INUVIALUIT, COPE's magazine, contained an article on the E.P.S. oil spill. The article included:

"COPE realizes that the gas and oil exploration in the Western Arctic means many research studies have to be done on the land and in the waters. Although COPE agrees that studies have to be done, we also know that unless they are done safely the land, the water, and the animals on which native people depend may be in danger.

"The studies must respect the whole environment, not just the thing they want to study.

"These are all things COPE and the people have asked the gas and oil companies to do and we expect the same of groups doing scientific research.

"When studies might endanger some part of the environment, COPE wishes to be asked early by government or industry. COPE needs this time to give information to the people and to get their comments. COPE also needs the time to ask other independent scientists if the studies about to be done are reasonable and safe."

LIST OF DOCUMENTS RELIED ON

Letter to A. Milne from L. Allison. March 4, 1975.

Letter to L. Allison from A. Milne. March 7, 1975.
And letter to Mr. G. Glazier from R. Brown. November 25, 1975.

COPE memo re: Offshore discharges of crude oil.
March 24, 1975.

Offshore discharges of crude oil. COPE memo. March 24, 1975. CONFIDENTIAL.

Telex to Mme. J. Sauve from Mr. Sam Raddi. March 25, 1975.

Letter to Mr. M.D. Thomas from R. Brown. March 25, 1975.

Telex to Mme. J. Sauve from Mr. Sam Raddi. April 1, 1975.

Telex to Mr. Sam Raddi from J.B. Seaborne, received April 4, 1975.

Telex to Mr. J.B. Seaborne from Mr. Sam Raddi. April 5, 1975.

COPE press release. April 7, 1975.

Telex to Mr. Sam Raddi from Mr. Seaborne. April 9, 1975.

Background to COPE's involvement in offshore experiments.
undated. COPE memo.

Meeting with Allen Milne. D.O.E. April 8, 1975. 9:00 p.m.
COPE memo.

Trip to Balaena Bay, N.W.T. April 9, 1975. COPE memo.

Letter to Mme. J. Sauve from Sam Raddi. May 8, 1975.

Letter to Sam Raddi from J. Sauve. June 27, 1975.
Appended. Notes prepared in response to the questions raised in letter from Sam Raddi dated May 8, 1975.

Letter to Sam Raddi from J. Buchanan. May 9, 1975.

Letter to J. Sauve from Sam Raddi. July 4, 1975.

Ocean Dumping Controlled by New Law. Environment Canada
New Release, received July 10, 1975.

Cape Parry cleanup. Beaufort Sea Project. COPE memo.
undated.

Even more about Cape Parry oil spill. COPE Memo.
August 6, 1975.

Letter to Sam Raddi from W. Bryant. November 12, 1975.

Letter to D. Thornton from R. Brown. November 12, 1975.

Proposed for the Investigation of Oil in Seasonal and
Polar Pack Ice. Nor Cor Engineering. October, 1975.
15 p.

Telex to COPE from E.P.S. Yellowknife. November 16, 1975.

COPE's position paper on field research. undated.

Minutes of meeting between COPE and E.P.S., Thursday
November 20, 1975. Prepared by COPE.

COPE/E.P.S. News Release. November 24, 1975.

Follow up on E.P.S. experiment. Undated. COPE memo.

Oil Spill Cancelled in 'Inuvialuit'. November-December
1975.

Letter to Mr. Sam Raddi from Mr. Wayne Bryant. December
11, 1975.

2

Lorraine M. Allison

Curriculum Vitae

EDUCATION:

- 1968 graduated BSc. (Honours in Zoology).
University of Alberta.
- 1971 MSc in Zoology. University of Toronto.

WORK EXPERIENCE:

- 1967 student assistant. University of Alberta studying the ecology of Franklin's grouse.
- 1968-69 research for master's thesis on the ecology and behaviour of coloured fox in Alaska.
- 1970 studied the interrelationships of caribou and wolves on central Baffin Island.
- 1971-72 in charge of research on the downstream effects of the Peace-Athabasca dam on mammals. Species emphasized were muskrats, moose and bison. I was a Canadian Wildlife Service employee seconded to the Peace-Athabasca Delta project.
- 1972-73 stationed in Whitehorse for Canadian Wildlife Service. I was responsible for the wildlife input into two series of land use information maps.
- 1974 on contract to Canadian Wildlife Service to study the behaviour of undisurbed wild polar bears.
- 1975 Summer - Horton River peregrine falcon study.
- October 1974 - present - retained on contract by COPE to assist counsel in the preparation and cross-examination of evidence of an environmental nature in the Mackenzie Valley Pipeline Inquiry. My duties included helping to prepare and work on COPE's fieldworker program. I was asked for advice on biological aspects of other projects from time to time.

PUBLICATIONS AND REPORTS:

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